IN THE CLAIMS:

Please amend Claims 1, 3, 4, 6, and 7, as follows:

1. (Currently Amended) A method of coding the bit-planes of an array of numbers comprising the steps of:

converting the values in the array of numbers to binary;

determining the number of bit-planes based on a number having the maximum absolute value of the array of numbers;

generating a tree structured description of significance information for each bit-plane of the array based on a modified quad-tree coding technique;

generating an SNR scalable encoding of the significance information for each bit-plane by describing new branches and leaves of the tree structured description corresponding to each bit-plane in a bottom-up-depth-first manner;

generating an encoding of refinement information for each bit-plane; and

generating a SNR scalable description of the array by concatenating the encoding of the significance information and the refinement information generated for each bit-plane.

2. (Original) The method according to claim 1 further comprising the step of truncating the binary values to a predetermined level of accuracy after the step of converting.

3. (Currently Amended) A method of coding the bit-planes of an array of numbers, wherein the values in the array of numbers have been converted to binary, the binary values have been truncated to a predetermined level of accuracy, and the number of bit-planes has been determined based on a number having the maximum absolute value of the array of numbers, the method comprising the steps of:

generating a tree structured description of significance information for each bit-plane of the array based on a modified quad-tree coding technique;

generating an SNR scalable encoding of the significance information for each bit-plane by describing new branches and leaves of the tree structured description corresponding to each bit-plane in a bottom-up-depth-first manner;

generating an encoding of refinement information for each bit-plane; and

generating a SNR scalable description of the array by concatenating the encoding of the significance information and the refinement information generated for each bit-plane.

4. (Currently Amended) An apparatus for coding the bit-planes of an array of numbers comprising:

means for converting the values in the array of numbers to binary;

means for truncating the binary values to a predetermined level of accuracy;

means for determining the number of bit-planes based on a number having the maximum absolute value of the array of numbers;

means for generating a tree structured description of significance information for each bit-plane of the array based on a modified quad-tree coding technique;

means for generating an SNR scalable encoding of the significance information for each bit-plane by describing new branches and leaves of the tree structured description corresponding to each bit-plane in a bottom-up-depth-first manner;

means for generating an encoding of refinement information for each bit-plane; and

means for generating a SNR scalable description of the array by concatenating the encoding of the significance information and the refinement information generated for each bit-plane.

5.   (Original) The apparatus according to claim 4 further comprising means for truncating the binary values to a predetermined level of accuracy.

6.   (Currently Amended) A apparatus for coding the bit-planes of an array of numbers, wherein the values in the array of numbers have been converted to binary, the binary values have been truncated to a predetermined level of accuracy, and the number of bit-planes has been determined based on a number having the maximum absolute value of the array of numbers, the apparatus comprising:

means for generating a tree structured description of significance information for each bit-plane of the array based on a modified quad-tree coding technique;

means for generating an SNR scalable encoding of the significance information for each bit-plane by describing new branches and leaves of the tree structured description corresponding to each bit-plane in a bottom-up-depth-first manner;

means for generating an encoding of refinement information for each bit-plane; and

means for generating a SNR scalable description of the array by concatenating the encoding of the significance information and the refinement information generated for each bit-plane.

7.   (Currently Amended) A computer coding system for an input image, the system having a sampling filter which decomposes the input image into four frequency subbands and outputs a Wavelet transform, the system comprising:

an encoder which generates a SNR scalable description of the Wavelet transform by concatenating an encoding of significance information and an encoding of refinement information generated for each bit-plane, wherein the encoding of the significance information for each bit-plane is generated by describing new branches and leaves of ~~the~~ a tree corresponding to each bit-plane in a bottom-up-depth-first manner.

8.   (Original) The system according to claim 7 further comprising a decoder which utilizes the SNR scalable description of the Wavelet transform to produce an output image.